

**LISTING OF THE CLAIMS**

The following is a complete listing of the claims:

1-17. (Canceled)

18. (Currently Amended) A porous pitch-based foam comprising a density ranging from about  $0.1 \text{ g/cm}^3$  to about  $0.8 \text{ g/cm}^3$ , a compressive strength in the range of about 2000 psi to about 6000 psi and a thermal conductivity below about  $1.0 \text{ W/m}\cdot\text{K}$  W/mK manufacture by the process comprising:

selecting a mesophase carbon powder derived from a petroleum pitch exhibiting a softening point of above about  $300^\circ\text{C}$ ;

placing a mesophase carbon particulate in a ceramic mold;

heating said mesophase carbon particulate in said mold under a non-oxidizing atmosphere at a pressure ranging from about 50 psi to about 500 psi to a temperature ranging from about  $300^\circ\text{C}$  to about  $700^\circ\text{C}$ ; and

controllably cooling said green foam at a cooling rate of about  $10^\circ\text{C}/\text{minute}$  to a temperature of about  $100^\circ\text{C}$ .